

ABSTRACT

Aspects of the present invention can be configured to demultiplex an asynchronously multiplexed video signal, which  
5 comprises images from a number of different cameras. Image matching techniques are used to assign input images with states. After a period, the number of states will generally equal the number of input cameras. The states may be modeled through any number of techniques, such as histogram analysis, clustering, and  
10 hidden Markov model analysis. Input images are assigned to states, and the input images are output as being associated with the states. Zone surveillance may be performed on a series of images from one or more of the states. Any events that occur can be distinguished and reported.